

Parameter	Unit	Value
Initial temperature	°C	25.0
Final temperature	°C	25.0
Initial pressure	atm	1.00
Final pressure	atm	1.00
Initial volume	L	1.00
Final volume	L	1.00
Initial mass	g	1.00
Final mass	g	1.00
Initial density	g/L	1.00
Final density	g/L	1.00
Initial concentration	mol/L	1.00
Final concentration	mol/L	1.00
Initial molar mass	g/mol	1.00
Final molar mass	g/mol	1.00
Initial number of moles	mol	1.00
Final number of moles	mol	1.00
Initial number of molecules	10 ²³	1.00
Final number of molecules	10 ²³	1.00
Initial number of atoms	10 ²³	1.00
Final number of atoms	10 ²³	1.00
Initial number of ions	10 ²³	1.00
Final number of ions	10 ²³	1.00
Initial number of electrons	10 ²³	1.00
Final number of electrons	10 ²³	1.00
Initial number of protons	10 ²³	1.00
Final number of protons	10 ²³	1.00
Initial number of neutrons	10 ²³	1.00
Final number of neutrons	10 ²³	1.00
Initial number of quarks	10 ²³	1.00
Final number of quarks	10 ²³	1.00
Initial number of leptons	10 ²³	1.00
Final number of leptons	10 ²³	1.00
Initial number of bosons	10 ²³	1.00
Final number of bosons	10 ²³	1.00
Initial number of fermions	10 ²³	1.00
Final number of fermions	10 ²³	1.00
Initial number of gauge bosons	10 ²³	1.00
Final number of gauge bosons	10 ²³	1.00
Initial number of Higgs bosons	10 ²³	1.00
Final number of Higgs bosons	10 ²³	1.00
Initial number of neutrinos	10 ²³	1.00
Final number of neutrinos	10 ²³	1.00
Initial number of quarks	10 ²³	1.00
Final number of quarks	10 ²³	1.00
Initial number of leptons	10 ²³	1.00
Final number of leptons	10 ²³	1.00
Initial number of bosons	10 ²³	1.00
Final number of bosons	10 ²³	1.00
Initial number of fermions	10 ²³	1.00
Final number of fermions	10 ²³	1.00
Initial number of gauge bosons	10 ²³	1.00
Final number of gauge bosons	10 ²³	1.00
Initial number of Higgs bosons	10 ²³	1.00
Final number of Higgs bosons	10 ²³	1.00
Initial number of neutrinos	10 ²³	1.00
Final number of neutrinos	10 ²³	1.00

Abstract of Disclosure

The present technique provides a method and system for analyzing the economic effect of a product warranty associated with a product. The technique utilizes a statistical model of the failure rate of the product. The technique also utilizes economic data associated with the product and the warranty. The technique performs convolutions of the economic data and the statistical model of the failure rate of the product to identify an effective cost of the product and an effective selling price for a replacement product for a failed product. The effective cost, effective selling price data, and variation in profit margin for the product are determined for a range of warranty durations and warranty types. This data enables a user to quantitatively analyze the effect of variations in product warranties.

Variable	Mean	SD	Min	Max
Age	34.5	10.2	21	55
Gender	0.45	0.50	0	1
Marital status	0.65	0.48	0	1
Education	12.5	1.5	9	16
Income	15.2	8.5	5	35
Occupation	1.2	0.8	0	2
Health status	0.75	0.42	0	1
Stress level	2.8	1.2	1	5
Life satisfaction	3.5	1.0	1	5
Resilience	4.2	0.8	3	5
Optimism	3.8	0.9	2	5
Self-efficacy	4.0	0.7	3	5
Emotional stability	3.2	0.6	2	4
Empathy	3.0	0.5	2	4
Prosocial behavior	3.5	0.7	2	4
Aggression	2.5	0.4	1	3
Conduct problems	1.8	0.3	1	3
Delinquency	1.5	0.2	1	3
Substance use	1.2	0.2	1	3
Peer influence	2.0	0.4	1	3
Family support	3.0	0.6	2	4
School support	2.8	0.5	2	4
Community support	2.5	0.4	2	4
Overall well-being	3.0	0.5	2	4